

Amendments to the Specification:

Please replace paragraph [0007] with the following paragraph:

[0007] U.S. Patent No. 5,822,053, which issued to Thraikill and is entitled “Machine Vision Light Source with Improved Optical Efficiency[”, to Thraikill;]” describes a device for constructing an illumination system using light emitting diodes (LEDs) ~~which~~ where the device is substantially uniform in the intensity incident on a given area. This invention by Thraikill gives no consideration to the uniformity of the angle of incidence of said illumination.

Please replace paragraph [0011] with the following paragraph:

[0011] The present invention also provides a device for inspecting semiconductor devices. The semiconductor devices include a nontrivial bi-directional reflectance distribution function and ~~includes~~ a nominal illumination angle. The inspection devices have a sensing element and a lens arrangement. A two dimensional light source is positioned at an angle complementary to the nominal illumination angle.

Please replace paragraph [0020] with the following paragraph:

[0020] Referring now to Figure 1, there is shown an illumination device of the prior art. In particular there is generally shown an imaging device 10 which includes a sensing element 12, a lens 13 and an annular illuminator 14. The annular illuminator 14 includes a ring of LEDs 15 ~~which are~~ aimed symmetrically at an object 16. Flux 15' from LEDs 15 is incident on object 16 at different acute angles 17 and 18, as measured from the normal, depending upon the location of object 16. The present invention provides for a substantially constant angle of illumination compared to the variable angle of illumination provided in the prior art.

Please replace paragraph [0029] with the following paragraph:

[0029] With specific reference to Figure 4 discrete sources 48 are preferably prepackaged LEDs on a flexible printed wire board formed into a cone 50. Cone 50 has full symmetry and a depth d sufficient to subtend the intended portion of object 16. With reference to Figure 5 a plurality of discrete light sources 48 could be packaged on a plurality of rigid printed wire boards 52 which can be tiled into an array, which is illustrated as two-fold symmetry. Rigid boards ~~53~~ 52 have a depth d and a width w sufficient to subtend an intended portion of object 16. It is understood that tiled light sources ~~52~~ could be arranged into any geometry.